

9 wherein the intermediate track detector is connected to outputs of the header  
10 identification unit, of the track crossing detector and of the header sequence detector.

15. (Twice Amended) Method for generating an intermediate track signal in an  
apparatus for writing data markings of an optical recording medium having data  
markings arranged along a track and header markings arranged laterally offset with  
respect to the centre of the track, and an intermediate track being arranged between  
two adjacent tracks, comprising the steps of

- checking a signal derived from detector elements of the apparatus  
for the presence of signal components which are typical of header areas,
- if the typical signal components are present, determining the order  
of signal components originating from differently arranged header markings,
- generating a signal corresponding to a track crossing frequency,
- generating the intermediate track signal from the order information  
and the signal corresponding to the track crossing frequency.

16. (Twice Amended) Method according to Claim 15, further comprising the step of  
detecting the track crossing frequency, and, if a limit value is undershot, generating an  
invalidity signal, which is cancelled only when signal components which are typical of  
header areas are present once again.